



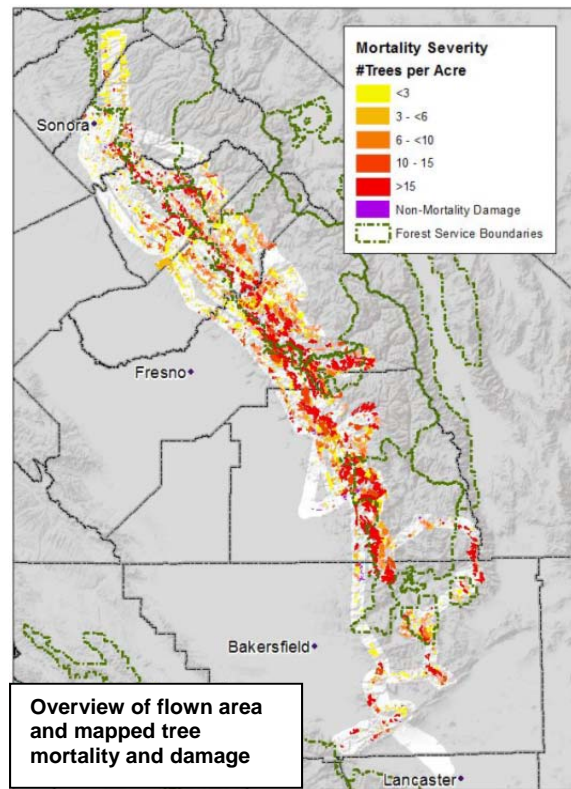
Fuels Assessment

Sierra Nevada Mountains and Foothills

May 22, 2015

The combination of a multi-year drought and significant bark beetle infestation has dramatically increased the number of dead and dying conifers, oaks, and brush across the Sierra and Sequoia National Forests, as well as the surrounding foothills. A recent aerial survey suggests that over 5 million trees have died within these two forests. This number is up from last year when approximately 300,000 trees had died. The deceased trees have immediately increased the amount of standing dead fuel load, and over-time will increase surface fuel loadings. Fire Managers/Firefighters should plan for and expect significant fire behavior in the affected areas once a persistent warm, dry weather pattern develops. A wildfires resistance to control in the aforementioned areas will exhibit extreme fire behavior conditions. Risk to ground suppression personnel and equipment from a greater likelihood of falling and/or weakened trees is also a major concern.

Normally, conifer forests across the southern and central Sierra experience something less than five percent mortality. In the last six months a substantial number of conifer stands have displayed a ten-fold increase in the number of dead and dying trees. It has been suggested that the current situation mimics the early stages of what occurred in the Southern California National Forests between 2001 and 2005.



Tree mortality in the Sequoia National Forest

Fire Managers/Firefighters need to plan for and anticipate the potential for extreme fire behavior conditions in the affected areas this summer. In addition, fire personnel and the public should have limited exposure where the threat of falling and/or weaken trees exists.

At the onset of a wildfire event, history shows a quick and effective initial suppression response is the first best tool in suppressing unwanted wildfire. Fire Managers/ Firefighters should consider suppression options and safe access prior to an event. Agency **Administrators need to ensure the**

concerns brought forward in this document are included in all suppression and or prescribed fire operations.

As of the time of this writing, the latest meteorological computer models suggest that the cool and somewhat wet weather pattern that is currently affecting the state will continue into the first week of June. Although there may be a brief period or two of warmer and drier conditions, the overall weather pattern is likely to keep temperatures near normal with occasional periods of showers and thunderstorms over the higher elevations of the Sierra.

As a result, there are no immediate fire behavior concerns despite the current state of the fuels and health of the forest. Large fire potential is expected to remain low through at least the end of May with mainly light initial attack activity anticipated. Should an extended period of warm, dry weather develop, fire activity will likely increase, but the threat of significant fires should remain low.

Pine mortality near Goodmill on the Hume Lake Ranger District of the Sequoia NF

